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10/815,128

03/31/2004

Teck Hu

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08/01/2007

Lucent Technologies Inc.
Docket Administrator - Room 3J-219
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

CHERY, DADY

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

08/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/815,128

Applicant(s)

HU, TECK

Examiner

Dady Chery

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/14/2004 8/4/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to because of the following informalities: The word "cueing" should be "queuing". Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Torsner et al. (US Patent 7,187,677, hereinafter Torsner).

Regarding claim 1, Torsner discloses *method of communication* (Fig. 3) comprising:

determining a probability of a stalling condition for at least one data packet in a sequence of data packets (Col. 3, lines 43 – 45); Determining whether a stall condition exists with respect to receiving a missing data unit is considered as the function described by the instant application.

and transmitting a flush command in response to the determined probability of the stalling condition (Col. 3, lines 55 –59). The removing of the missing data from the receiver buffer is considered as transmitting a flush command.

Regarding claim 2, Torsner discloses *the probability of a stalling condition is determined in response to at least one wireless system parameter (Fig. 9, Col. 3, lines 43 - -63). Where the missing data unit is considered as the system parameter*

Regarding claim 3, Torsner discloses *the at least one wireless system parameter comprises a size of the sequence of data packets, a number of repeat request processes, at least one priority for each of the number of repeat request processes, a probability of error over an uplink and a probability of error over a downlink (Col. 3, lines 64 – Col. 4, lines 36).*

Regarding claim 4, Torsner discloses *estimating a wait time, prior to the transmitting of a flush command, in response to the determined probability of the stalling condition (Col. 3, lines 51-55).*

Regarding claim 10, Torsner discloses *the method of transmitting a recommended range for a service time-out condition in response to the determined probability of a stalling condition (Col. 3, lines 6 –10). The cancellation of retransmission is considered as a service time-out condition.*

Regarding claim 11, Torsner discloses *the service time-out condition corresponds with at least one of a high-speed downlink packet access service and a high-speed uplink packet access service (Fig. 9). Where the core network (160) is*

considered as the high-speed downlink packet access service and the UMTS network (220) is considered as the high-speed uplink packet access service.

3. Claims 12 -15 are rejected under 35 U.S.C. 102(e) as being anticipated by Chao (US Patent 6,693,910, hereinafter Chao).

Regarding claim 12, Chao discloses a method of communication comprising:

receiving a recommended range for a service time-out condition (Col. 2, lines 36 – 40). Where the receiving range R1-R3 is considered as a range for service time-out.

transmitting a service time-out range in response to the received recommended range (Col. 2, lines 60 –66). A timer "time-out" is transmitted in response to the received range.

Regarding claim 13, Chao discloses *the recommended range for a service time-out condition is generated in response to determining a probability of a stalling condition for a packet in a sequence of data packets (Col. 2, lines 60 –63 and Col. 3, lines 1 – 30).*

Regarding claim 14, Chao discloses *the probability of a stalling condition is determined in response to at least one wireless system parameter (Fig. 1 and col. 3, lines 1 –19).*

Regarding claim 15, Chao discloses *at least one wireless system parameter comprises a size of the sequence of data packets, a number of repeat request processes, at least one priority for each of the number of repeat request processes, a*

probability of error over an uplink and a probability of error over a downlink (Col. 3, lines 20 – 38).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 2616

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5- 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torsner as applied to claim 4 above, and further in view of Watanabe et al. (US Patent 6,285,662, hereinafter Watanabe).

Regarding claim 5, Torsner discloses the *step of estimating a wait time* (Col. 3, lines 51 –52).

Torsner fails to mention *the step comprises determining an average number of time slots for at least a first data packet prior to transmission*.

However, Watanabe teaches a method to determine an average number of time slots prior to transmission a first data packet (Fig. 1, 56, Col. 13, lines 13 –15 and Col. 14, lines 12 – 14).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine an average number of time slots prior to transmission a first data packet for the purpose of selecting a size of a contention window for a packet of data system (Abstract).

Regarding claim 6, Torsner discloses *the step of comprises:*

queuing at least the first data packet for transmission (Fig. 5A, Col.6, lines 66 – Col.7, lines 26);

determining if a second data packet having a lower sequential designation than the first data packet has stalled (Col. 3, lines 55 –57).

Torsner fails to teach *determining an average number of waiting time slots*. However, Watanabe teaches a method to determine an average number of time slots (Fig. 1, 56, Col. 13, lines 13 –15).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine an average number of time slots for the purpose of selecting a size of a contention window for a packet of data system (Abstract).

Regarding claim 7, Torsner discloses *the step of transmitting a flush command comprises: transmitting the first data packet in response to determining the second data packet has stalled* (Col. 3, lines 55- 59 and Col. 7, lines 10 – 16).

Regarding claim 8, Torsner discloses *the step of transmitting the first data packet comprises: determining if the second data packet is designated for a particular memory location* (Fig. 5A and 5B, Col.6, lines 66 – Col.7, lines 26).

Regarding claim 9, Torsner discloses *the particular memory location is at one end of a finite buffer* (Fig. 5A).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yi et al. (US Application 2003/0128705) discloses a System and Method for Avoiding Stall.

Jiang (US Application 2003/0123403) discloses Timer Based Stall Avoidance.

Augsburg et al. (US Application 2005/060518) discloses a Method of Detecting Stall in a Shared Resource.

Seddigh et al. (US Patent 7,035,214) discloses a System and Method for NACK Based in TCP.

Seidel et al. (US Application 2004/0062222) discloses a High Rate Packet Data Transmission.

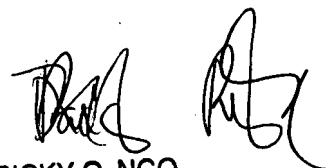
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dady Chery whose telephone number is 571-270-1207. The examiner can normally be reached on Monday - Thursday 8 am - 4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dady Chery 07/26/2007



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER